

IN THE CLAIMS:

Please cancel Claims 106 and 116 without prejudice to prosecution in a continuation, division or other related application.

Please amend Claims 105 and 107-115 as follows:

B² Sub C¹
~~105. (Amended) [Apparatus comprising a] A substrate with a surface, said surface comprising at least two predefined regions at known locations of said surface, said predefined regions [containing] of said surface comprising oligonucleotides of different, known [oligonucleotide] sequences, the oligonucleotides [thereon] covalently attached to said surface, and said predefined regions each occupying an area of less than about [0.1] 0.01 cm².~~

~~107. (Amended) [Apparatus as] The substrate recited in claim 105 wherein said area is less than 10000 μm^2 .~~

~~108. (Amended) [Apparatus as] The substrate recited in claim 105 wherein said area is less than about 100 μm^2 .~~

B³ Sub C²
~~109. (Amended) [Apparatus as] The substrate recited in claims 105, 106, 107, or 108 wherein said [oligonucleotide sequences] oligonucleotides are [substantially] at least 50% pure within said predefined regions.~~

Sub C²
~~110. (Amended) A substrate with a surface comprising 10³ or more [different] oligonucleotides with different, known sequences covalently attached to [a] the surface in predefined regions.~~

Sub C³
~~111. (Amended) [A] The substrate as recited in claim 110 wherein said substrate comprises 10⁴ or more different oligonucleotides with known sequences [in] covalently coupled to predefined regions of said substrate.~~

112. (Amended) [A] The substrate as recited in claim 110 wherein said substrate comprises 10^5 or more different oligonucleotides with known sequences in predefined regions.

113. (Amended) [A] The substrate as recited in claim 110 wherein said substrate comprises 10^6 or more different oligonucleotides with known sequences in predefined regions.

114. (Amended) [A] The substrate as recited in claim [105] 110 wherein said oligonucleotides are [substantially] at least 50% pure within said predefined regions.

115. (Amended) [A] The substrate as recited in claim [105] 110 wherein the oligonucleotides are attached to the surface by a linker.

Please add new claims 117-120 as follows:

~~117.~~ An array of more than 500 different oligonucleotides with known sequences covalently coupled to a surface of a substrate in predefined regions, each of said predefined regions being an area of less than about 0.01 cm^2 and each predefined region comprising oligonucleotides of known sequence.

~~8 118.~~ The array as recited in claim ~~117~~⁷ wherein said area is less than $10,000 \text{ microns}^2$.

~~119.~~ The array as recited in claim 117 comprising more than 1000 oligonucleotides of known sequences.

~~120.~~ The substrate as recited in claim 117 made by the process of:
exposing a first region of said substrate to light to remove photoremovable groups from nucleic acids in said